

Thomas J. Klem, MScFPE  
Fire Protection Engineer  
24 Robert Road  
Stoughton, MA 02072  
(781) 344-1115

## Experience

- 1994- Present      T. J. Klem and Associates, Stoughton, MA.  
Owner and principal engineer of full service fire protection engineering firm. Provides diverse clientele fire protection engineering assessments of fire losses and pre-incident hazards and develops operating procedures for loss prevention purposes. Examples of cases include equipment malfunctions, diffusion of flammable liquids and gasses, static electric ignition of substances, ignition and flame spread characteristics of materials and products and fire protection system performance. Application of fire protection engineering principles to diverse environments such as commercial aircraft and industrial processes. Provides analysis of fire and building code applicability. As Certified Fire Investigator, (CFI) provides fire origin, growth and spread determinations for a wide spectrum of occupancy fire losses, including cases involving arson. Appointed "fire expert" by chief federal judge to counsel and report on fire safety findings based on the analysis of a detention center within a high-rise building complex. Fire protection consultant to Arthur Anderson LLP, Business Fraud Risk Services. Lectures on fire protection engineering topics to various technical groups, including IAAI chapters throughout the country. As fire service liaison for the MA Chapter of the Society of Fire Protection Engineers, volunteers to assist local fire investigators on various fire protection engineering issues.
- 1982 - 1994      National Fire Protection Association, Quincy, MA  
Director, Fire Investigations (Chief Fire Investigator). Administered the association's aggressive fire investigations program. Analyzed technically significant fire occurrences and integrated results into ongoing association standards-making programs, resulting in meaningful changes in codes and advancement of the state of the art. Prepared and directed dissemination of technical reports to fire protection community. Integrated state-of-the-art technology into program and among key engineering staff. Selected to represent the association on technical matters to outside organizations including DOT Committee on aircraft Fire Safety, the media, and in testimony before the U.S. Congress. Frequent guest lecturer to fire protection community and federal law enforcement agencies.

Page 2: Curriculum Vitae of Thomas J. Klem

1976 - 1982      United States Fire Administration, Washington, D.C.  
Investigative Officer, National Fire Data Center and Office of the Administrator. Managed the Administration's major fires and applied research fire study programs. Selected to provide information and testimony to Congress and other government agencies regarding topical fire protection issues. Developed national fire investigative protocols for electrical fires, fires involving thermal insulation, and manufactured home fires.

1966 - 1976      Prince George's County Fire Department, Upper Marlboro, MD  
Served in various positions with steadily increasing responsibility, up to Executive Officer to the Fire Chief, accountable for department management and development of long-range planning. As Captain, Operations and Engineering Division, and Captain, Hazardous Materials Division, had responsibility for developing standard operating procedures and fire code enforcement and interpretation. Also served as firefighter, fire sergeant, fire inspector and fire investigator.

Education      B.A., University of Maryland, Fire Protection and Business  
M.S., Fire Protection Engineering, Worcester Polytechnic Institute  
Certified Fire Investigator (CFI), International Association of Arson Investigators (IAAI)

Memberships and Affiliations

Member, Society of Fire Protection Engineers  
Member, New England Chapter, Society of Fire Protection Engineers  
Member, International Association of Arson Investigators  
Member, National Fire Protection Association  
Member, NFPA Technical Committee on Telecommunications  
Chair, Fire Prevention, Pre-fire Planning and Emergency Response and Recovery  
Associate Member, International Association of Fire Fighters (IAFF),  
Local 1619, Retired, Prince George's County Fire Fighters

Significant Fire Investigations: See separate listing

Published Articles and Products: See separate listing

## T. J. Klem & Associates

CONSULTING FIRE PROTECTION ENGINEERS

Thomas J. Klem

### Published Articles

- "Three Workers Die in Electrical Power Plant Fire," *NFPA Journal*, March/April 1993 (with Casey C. Grant);
- "Major High-Rise Fires Reveal Protection Needs," *NFPA Journal*, September/October 1992;
- "Fire Storm '91 Fire Case Study," May 1992;
- "Twenty-Five Die in Food Plant Fire," *NFPA Journal*, January/February 1992;
- "High-Rise Fire Claims Three Philadelphia Fire Fighters," *NFPA Journal*, September/October 1991;
- "Stephan Bridge Road Fire Case Study," April 1991;
- "Board and Care Fire Claims Four," *Fire Command*, December 1990;
- "Earthquake Tests Disaster Response," *Fire Command*, December 1989;
- "The Crash of United Flight 232," *Fire Command*, October 1989 (with Mark T. Conroy);
- "Black Tiger Fire Case Study," July 1989;
- "Los Angeles High-Rise Bank Fire," *Fire Journal*, May/June 1989;
- "The Hackensack Fatalities," *Fire Command*, October 1988;
- "Fact Sheet - Interstate Bank Building Fire," *Fire Command*, July 1987;
- "Fatal Live Fire Training Incident," *Fire Command*, May 1988;
- "Fact Sheet - Fire Fighter Fatality Training Incident," *Fire Command*, December 1987;
- "Triple Tragedy in Detroit," *Fire Command*, July 1987;
- "97 Die in Arson Fire at Dupont Plaza Hotel," *Fire Journal*, May/June 1987;
- "56 Die in English Stadium Fire," *Fire Journal*, May 1986;
- "The Bradford, England, Stadium Fire," *Fire Command*, April 1986;
- "Fire at the Prudential Building, Boston, MA," *Fire Command*, March 1986 (with Greg Kyte);
- "Fire Fighter Dies in Ammonia Explosion," *Fire Command*, February 1985;
- "Explosion in Cold Storage Kills Fire Fighter," *Fire Journal*, March 1985;
- "New York Dwelling Fire Kills Family of Seven," *Fire Journal*, November 1984;
- "The Rural Fire Picture: A Hidden Story," *Fire Journal*, September 1984;
- "Partners in Fire Investigation," *Fire Journal*, July 1984;
- "Scores Die in Tank Fire Boilover," *Fire Service Today*, June 1983;
- "Twelve Die in Fire at Westchase Hilton Hotel," *Fire Journal*, 1983;
- "Six Die in Wisconsin Group Home Fire," *Fire Journal*, January 1984;

### Audio-Visual Projects

Technical Advisor to NFPA Video Projects:

- "Countdown to Disaster"
- "Fire Power"
- "Fire Storm '91 Case Study"
- "Fire in the Hills: The Oakland Story"
- "Four Hotel Fires: Lessons Learned" (slide package)

Producer, USFA Investigative Protocols:

- "Conducting Mobile Home Investigations and their Analysis"
- "Conducting Thermal Insulation Investigations and their Analysis"
- "Conducting Electrical Fire Investigations and their Analysis"

# T. J. Klem & Associates

CONSULTING FIRE PROTECTION ENGINEERS

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## Selected Significant Fire Investigations

ATLANTA BOARD AND CARE FIRE, July 1993  
THAILAND TOY FACTORY FIRE, May 1993  
LOS ANGELES APARTMENT HOUSE FIRE, May 1993  
WORLD TRADE CENTER FIRE, February 1993  
WEYMOUTH, MA., HOSPITAL FIRE, January 1993  
WINDSOR CASTLE FIRE, December 1992  
NEWARK COGENERATION FACILITY FIRE, December 1992  
TWA AIRCRAFT FIRE AT KENNEDY AIRPORT, July 1992  
SPOKANE, WA., WILDLAND FIRE, October 1991  
OAKLAND/BERKLEY HILLS CONFLAGRATION, October 1991  
IMPERIAL FOODS PROCESSING PLANT FIRE HAMLET, NC., September 1991  
ONE MERIDIAN PLAZA, THREE FIRE FIGHTER FATALITIES, February 1991  
FATAL BOARD AND CARE FIRE, BESSEMER, ALABAMA, September 1990  
GRAYLING, MI., WILDLAND FIRE, May 1990  
SOCIAL CLUB FIRE, BRONX, NEW YORK, March 1990  
ELDERLY HOUSING FIRE, ROANOKE, VA., December 1989  
THE LOMA PRIETA EARTHQUAKE, SAN FRANCISCO BAY AREA, CA., October 1989  
NORFOLK, VA, NURSING HOME FIRE, October 1989  
CRASH OF UNITED AIRLINES FLIGHT 232, SIOUX CITY, IA, July 1989  
BOULDER, CO., WILDLAND FIRE, July 1989  
ATLANTA OFFICE BUILDING FIRE, June 1989  
HOSPITAL FIRE, ST. JEROME, QUEBEC, January 1989  
FIVE FIRE FIGHTER FATALITIES, HACKENSACK, NEW JERSEY, July 1988  
FIRST INTERSTATE BANK BUILDING FIRE, LOS ANGELES, CA., May 1988  
FATAL LIVE TRAINING EXERCISE, MILFORD, MICHIGAN, October 1987  
THREE DETROIT FIRE FIGHTER FATALITIES, March 1987  
DUPONT PLAZA HOTEL FIRE, SAN JUAN, PUERTO RICO, December 1986  
FIREWORKS EXPLOSION, JAFFREY, NH., September 1986  
PRUDENTIAL HIGH-RISE BUILDING FIRE, BOSTON, MA., January 1986  
SOCCER STADIUM FIRE, BRADFORD, ENGLAND, May 1985  
HOTEL FIRE, WAUKEGAN, IL., December 1984  
FIRE FIGHTER FATALITY, SHREVEPORT, LA., September 1984  
ROOMING HOUSE, BEVERLY, MA., July 1984  
CONFLAGRATION, PHILADELPHIA, PA., May 1984  
CRUISE SHIP FIRE, PORT CANAVERAL, FL, March 1983  
HOTEL FIRE, DAYTON, OH., November 1983  
HOTEL FIRE, FORT WORTH, TX., June 1983  
AIR CANADA FIRE, CINCINNATI, OH., June 1983  
HOTEL FIRE, EAU CLAIRE, WI., February 1983  
FUEL STORAGE BOILOVER, CARACAS, VENEZUELA, December 1982  
STOUFFER'S HOTEL FIRE, HARRISON, NY., May 1980  
BEVERLY HILLS SUPPER CLUB FIRE, SOUTHGATE, KY., May 1977

## T. J. Klem & Associates

CONSULTING FIRE PROTECTION ENGINEERS  
CERTIFIED FIRE INVESTIGATORS

Thomas J. Klem  
email: tjkle@aol.com

### THOMAS J. KLEM EXPERT TESTIMONY 1995-2002

1. Oldham, et al., v. MHTC Jackson Co. (Missouri) Circuit Court, CV 89-13327.
2. United States v. Johnson, United States District Court for the Middle District of Alabama, Eastern Division, Docket No. 95-00123. (Note: appointed by the court as fire expert and submitted a technical report).
3. O'Neill v. USAir, United States District Court, Central District of California, CV 92-0475.
4. Handy, et al., v. First Interstate Bank Building, Los Angeles Superior Court, C 690948.
5. Cogliano v. DiversiTech, et al., Commonwealth of Massachusetts, Middlesex Superior Court., 95-2792.
6. Sunland Beef, et al., v. Dupps, Superior Court of Arizona, CV 95-08167.
7. John Doe, et al., v. Don Younger, United States District Court, Eastern District of Kentucky. Civil action No. 91-187.
8. Judy Violette and Holyoke Mutual Insurance Company v. Dennison Manufacturing Company, Middlesex Superior Court, Cambridge, MA Civil Action No. 94-5995.
9. O'Brian Cogeneration v. Hawk-Siddeley Power Engineering et al., Superior court of New Jersey, Essex County. Docket No. EXL-L-3218-95, (June, 1997).
10. Minehan, Adm. V. Rapids Realty Co. and Peter Elliot & CO., Civil Action No. 95-5039C, Suffolk, MA ss.
11. Ellen Tracy, et al, v. J&R Sprinkler Co, State of VT, Bennington County, ss., Benington Superior Ct. Docket SO394-95 Bss.

12. Duncan v. House of Lloyd, State of MI, Circuit Court for the County of Berrien, Case No. 91-2340-NP-T (Deposition, Feb., 1998).
13. O'Brian Cogeneration v. Hawk-Siddeley Power Engineering et al., Superior court of New Jersey, Essex County. Docket No. EXL-L-3218-95, (February, 1998).
14. Duncan v. House of Loyds, State of MI, Circuit Court for Berrien County, Case 91-2340-NP-T (Hearing and testimony on spoliation issues), May, 1998.
15. Niddrie v. Travelers, Circuit Court of Cook County, IL, No. 92 L 14074, April, 1998, Deposition.
16. National Transportation and Safety Board (NTSB) Hearing on FEDEX Fire Incident, Newberg, NY, Deposition, May, 1998.
17. Niddrie v. Travelers, Circuit Court of Cook County, IL, No. 92 L 14074, October, 1998, Trial.
18. Bob's Auto Care v. Ford Motor Company, Norfolk County Superior Court, 97-01757, Deposition, October, 1998.
19. Green v. Hartford Insurance Company, The State of New Hampshire, Superior Court Rockingham, SS, Case 98-C-49, Deposition, December, 1998.
20. Jonathan Edwards v. Cynthia Charest of behalf of the Estate of Larry Charest, the State of NH, Superior Court, No. 98-C-0038, Deposition, 1999.
21. William Faulkner d/b/a Natural Designs and Landscaping v. Ansul Fire Protection, State of NC, County of Cumberland, Superior Court, No. 97 CV8621, Deposition, July, 1999.
22. Francis Ford et al., v. Emro Marketing Co. et al., State of Ohio, Franklin County, Superior Court, No. 98 CVC 03-2203, Deposition, August, 1999.
23. Truck Insurance Exchange v. Time Warner Operations, Inc. et al., Superior Court of the State of CA, or the County of Orange, Combined Cases No. 77 93 66 and 79 04 46, Trial, October, 1999.
24. Dale Penney v. Forster, Inc, Superior Court of State of Maine, CV-98-076, December, 1999.
25. William Cook, et al. v. Tidemill Farms, Inc., Hancock, VT, Superior Ct. CV 99-83. August, 2000.



26. Tolentino et al. v. United Parcel Service and Consolidated Rail Corp., U.S. District Court, Civil Action 98 10369-MEL. Depositions, August and September, 2000.
27. Duro Industries, Inc. et al v. Sherle Wagner International, United States District Court, District of MA,, CV 12216 RWZ. Deposition, December, 2000.
28. Bob's Auto Care v. Ford Motor Company, Norfolk County Superior Court, 97-01757, Trial, February, 2001.
29. Tolentino et al. v. United Parcel Service and Consolidated Rail Corp., U.S. District Court, Civil Action 98 10369-MEL. Trial, November, 2001.
30. Thom Realty Corporation v. Baker Fire Equipment Co., Inc. Middlesex Superior Court Civil Action No. 99-5144. Deposition, January, 2002.
31. Oroujo v. O'Niel, Rockingham County, NH, Docket #OO-C-878. Deposition, January, 2002.
32. Arbella Mutual Insurance Co. V. Paul Smith and Debra Smith, Norfolk County Superior Court, Docket No. 0001356, Trial February, 2002.
33. The Shantigar Foundation v. Bear Mountain Builders and Cove Builders, Franklin County, MA Superior Court, Docket No. 00106, Trial May, 2002.
34. Testo v. Toyotomi and Home Depot, Superior Court, Judicial District of Fairfield at Bridgeport, CV 99-0360735 S, Deposition, June, 2002.
35. Buckley, et al v. General Motors Corporation et al, Circuit Court of the County of St. Louis Missouri, Case # 00CC-003492 H CV, Deposition, July, 2002.
36. ~~Kaufman~~ Kaufman v. Ming International and GE-Ray Fabrics, United States District Court for the District of Vermont, Civil Action No. 1: 01-CV-59, Deposition, July, 2002.
37. ~~Trans North Turbo Air~~ Trans North Turbo Air v. North 60 Petro, Supreme Court of the Yukon Territory, S.C. No. 00-A-0174, Trial, July, 2002.
38. Kaufman v. Ming International and GE-Ray Fabrics, United States District Court for the District of Vermont, Civil Action No. 1: 01-CV-59, Deposition, August, 2002.

39. Commonwealth v. Thomas Crouse, Commonwealth of Massachusetts Middlesex Superior Court Criminal Business, No. 2001-0733, Trial October, 2002.

40. United States District Court, District of Connecticut, Albany Insurance v. United Alarm Service et al, Case No. 3:00CV 1193 (AWT). Deposition February, 2003.

41. Nicholas Jace and Scottsdale Insurance v. Hampshire Fire Protection Co., Rockingham County (NH) Superior Court No. 02-C-58, Deposition June, 2003.

42. Biba's Restaurant v. Advanced Fire Protection, Civil Action Suffolk Superior Court, MA, Deposition, 6/3/03.

43. Hartford Mutual v. Apria Healthcare, Inc. et al., United States District Court, District of Maryland, Civil action No. DKC-03-CV-180, Deposition, 8/6/03.

44. Trustees of Thachmont Condominiums v. Hewlett Packard, NOCV #1999-00283, Norfolk County (MA) Superior Court, Trial, October, 2003.

45. Ronald Hollander, et al. v. India's Restaurant, Inc., Circuit Court of Maryland for Anne Arundel County, Civil Case C-200-67827 CN, Deposition, 11/25/03.

46. Ronald Hollander, et al. v. India's Restaurant, Inc., Circuit Court of Maryland for Anne Arundel County, Civil Case C-200-67827 CN, Arbitration, 12/9-12/03.

47. Hartford Mutual v. Apria Healthcare, Inc. et al., United States District Court, District of Maryland, Civil action No. DKC-03-CV-180, Deposition, 12/19/03.

48. Hartford Mutual v. Apria Healthcare, Inc. et al., United States District Court, District of Maryland, Civil action No. DKC-03-CV-180, Deposition, 2/4/04.

50. Carmon's Veranda et al, Zachs Enterprises et al, Middlesex Superior Court, Civil Action 01-3349, Deposition, 2/10/04.

51. Heinz v. Command Force Security Systems Inc., United States District Court, Civil Action # 3:03 CV1015 (DJS), Deposition 3/16/04.

52. Heinz v. Command Force Security Systems Inc., United States District Court, Civil Action # 3:03 CV1015 (DJS), Deposition 5/6/04.

53. 500 Associates v. Firetech Sprinkler Corporation, United states District Court, for District of CT, 99-00191-B, Deposition, 5/21/04.

54. Kaplan, et al v. Keys North Atlantic, Commonwealth of MA, Middlesex Superior Ct. No. 0200598, Deposition, 6/11/04.

55. Texas Treasure Fields v. SimplexGrinnell, The County Court, Dallas County, TX # CC-03-02301-C, Deposition 9/ 23/04.



56. United States of America v. Garry DeCicco, U S District Court of MA, Case # 00-10365-EFH, Trial Testimony 1110/04.

# T. J. Klem & Associates, LLC

CONSULTING FIRE PROTECTION ENGINEERS

CERTIFIED FIRE INVESTIGATORS

Thomas J. Klem  
email: tjkle@aol.com

July 2005

The compensation rate for Thomas J. Klem of T. J. Klem and Associates, LLC is \$150/hr. for fire protection analysis and \$200/hr. for deposition and trial testimony.

Thomas J. Klem  
Principal  
T. J. Klem and Associates, LLC